

2 a separation channel having a cathode reservoir at one and an anode  
3 reservoir at an opposite end; and  
4 an injection channel having a first leg and a second leg, the first leg  
5 connected at one end to a plurality of sample reservoirs and at the other end to the separation  
6 channel, and the second leg connected at one end to the separation channel and at the other end  
7 to a waste reservoir.

1 2. The capillary array electrophoresis plate of claim 1, wherein the first and  
2 second legs of the injection channel are disposed collinear with one another.

1 3. The capillary array electrophoresis plate of claim 1, wherein the first leg  
2 of the injection channel is connected at one end to a loading channel connected to the plurality  
3 of sample reservoirs.

1 4. A capillary array electrophoresis plate, comprising:  
2 an array of separation channels, each separation channel having a  
3 cathode reservoir at one end and an anode reservoir at an opposite end; and  
4 an array of injection channels, each injection channel having a first leg  
5 and a second leg, the first leg connected at one end to a plurality of sample reservoirs and at the  
6 other end to one of the separation channels, and the second leg connected at one end to one of  
7 the separation channels and at the other end to a waste reservoir.

1 5. The capillary array electrophoresis plate of claim 4, wherein  
2 the cathode reservoirs are multiplexed.

1 6. The capillary array electrophoresis plate of claim 4, wherein  
2 the anode reservoirs are multiplexed.

1 7. The capillary array electrophoresis plate of claim 4, wherein  
2 the waste reservoirs are multiplexed.

1 8. A method of sequentially loading a plurality of different samples onto an  
2 electrophoretic separation channel, comprising:

3 providing a capillary array electrophoresis plate, comprising:  
4 a separation channel having a cathode reservoir at one and an  
5 anode reservoir at an opposite end; and  
6 an injection channel having a first leg and a second leg, the first  
7 leg connected at one end to a plurality of sample reservoirs and at the other end to the  
8 separation channel, and the second leg connected at one end to the separation channel and at  
9 the other end to a waste reservoir;  
10 moving a first sample from a first sample reservoir through first leg of  
11 the injection channel and into the separation channel; and subsequently,  
12 electrophoretically separating the first sample in the separation channel;  
13 and subsequently,  
14 moving a second sample from a second sample reservoir through first  
15 leg of the injection channel and into the separation channel; and subsequently,  
16 electrophoretically separating the second sample in the separation  
17 channel.

1 9. A method of sequentially loading a plurality of different samples onto an  
2 electrophoretic separation channel, comprising:  
3 providing a capillary array electrophoresis plate, comprising:  
4 an array of separation channels, each separation channel having a  
5 cathode reservoir at one end and an anode reservoir at an opposite end; and  
6 an array of injection channels, each injection channel having a  
7 first leg and a second leg, the first leg connected at one end to a plurality of sample reservoirs  
8 and at the other end to one of the separation channels, the second legs connected at one end to  
9 one of the separation channels and at the other end to a waste reservoir;  
10 moving a plurality of first samples from the plurality of first sample  
11 reservoirs through the plurality of first legs of the injection channels and into the plurality of  
12 separation channels; and subsequently,  
13 electrophoretically separating the plurality of first samples in the  
14 separation channel; and subsequently,

15 moving a plurality of second samples from the plurality of second  
16 sample reservoirs through the plurality of first legs of the injection channels and into the  
17 plurality of separation channels; and subsequently,  
18 electrophoretically separating the plurality of second samples in the  
19 separation channel.

1 10. A capillary array electrophoresis plate, comprising:  
2 a separation channel having a cathode reservoir at one and an anode  
3 reservoir at an opposite end; and  
4 an injection channel having a first leg and a second leg, wherein,  
5 the first leg is connected at one end to a first waste reservoir and  
6 at the other end to the separation channel, and a first plurality of sample reservoirs are  
7 connected to the first leg along the length of the first leg; and  
8 the second leg is connected at one end to a second waste  
9 reservoir and at the other end to the separation channel, and a second plurality of sample  
10 reservoirs are connected to the second leg along the length of the second leg.

1 11. A method of sequentially loading four different samples onto an  
2 electrophoretic separation channel, comprising:  
3 providing a capillary array electrophoresis plate, comprising:  
4 a separation channel having a cathode reservoir at one and an  
5 anode reservoir at an opposite end; and  
6 an injection channel having a first leg and a second leg, wherein,  
7 the first leg is connected at one end to a first waste  
8 reservoir and at the other end to the separation channel and a plurality of sample reservoirs are  
9 connected to the first leg along the length of the first leg; and  
10 the second leg is connected at one end to a second waste  
11 reservoir and at the other end to the separation channel and a plurality of sample reservoirs are  
12 connected to the second leg along the length of the second leg;  
13 moving a first sample from a first sample reservoir through first leg of  
14 the injection channel and into the separation channel; and subsequently,

electrophoretically separating the first sample in the separation channel.

12. The method of claim 11, further comprising:  
moving a second sample from a second sample reservoir through first  
leg of the injection channel and into the separation channel; and subsequently,  
electrophoretically separating the second sample in the separation  
channel; and subsequently.

13. The method of claim 11, further comprising:  
moving a third sample from a third sample reservoir through second leg  
of the injection channel and into the separation channel; and subsequently,  
electrophoretically separating the third sample in the separation channel;  
and subsequently.

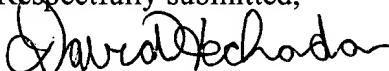
14. The method of claim 11, further comprising:  
moving a fourth sample from a second sample reservoir through second  
leg of the injection channel and into the separation channel; and subsequently,  
electrophoretically separating the fourth sample in the separation  
channel.

#### CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this  
Application are in condition for allowance. The issuance of a formal Notice of Allowance at  
an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of  
this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

  
David Heckadon

(Granted Limited Recognition under 37 CFR §10.9(b) –  
see enclosed Limited Recognition Document)

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